

## CLAIMS

What is claimed is:

1. A method for reducing the power required by an integrated services hub supporting a plurality of telephone circuits, comprising offsetting ringing of each of the plurality of telephone  
5 circuits such that all the telephone circuits do not ring simultaneously.

2. The method of claim 1 wherein the step of offsetting ringing of each of the plurality of telephone circuits further comprises:

providing each telephone circuit with a ring cadence comprising a ringing interval and a  
10 non-ringing interval; and

defining a starting point for the ringing interval within each telephone circuit's ring cadence such that the starting point for the ringing interval for at least one telephone circuit falls substantially outside the ringing intervals of the remaining telephone circuits.

3. The method of claim 2 wherein the step of defining a starting point for the ringing interval within each telephone circuit's ring cadence is defined such that the starting point for the ringing interval for each telephone circuit does not fall substantially within the ringing interval of  
15 any other telephone circuit.

20 4. The method of claim 3 wherein the ring cadence is a six second repeating cadence having a 1.5 second ringing interval and a 4.5 second non-ringing interval.

5. The method of claim 4 wherein the ring cadence has a granularity of 250ms.

6. The method of claim 4 wherein the ring signature is varied within the ringing interval.

7. The method of claim 1 further comprising dividing the plurality of telephone circuits into  
5 at least two channel bank groups and offsetting the ringing of the telephone circuits within each  
of the channel bank groups such that no more than about one telephone circuit from each channel  
bank group is ringing simultaneously.

8. An apparatus for reducing the power required by an integrated services hub supporting a  
10 plurality of telephone circuits, comprising:

a plurality of subscriber line access circuits (SLICs) connected to and receiving power  
from a ring voltage power supply, each SLIC connected to telephone circuit further comprising a  
telephone line for driving a ring voltage to a telephone connected to the telephone line; and

a microprocessor connected to and controlling the SLICs such that all the telephone  
15 circuits do not ring simultaneously.

9. The apparatus of claim 8 wherein each SLIC further comprises a positive terminal and a  
negative terminal connected to the ring voltage power supply and internal power amplifiers that  
drive power received from the ring voltage power supply via the terminals onto the telephone  
20 line.

10. The apparatus of claim 8 wherein the plurality of telephone circuits is divided into at least  
two channel bank groups, the microprocessor connected to and controlling each of the channel

bank groups such that no more than about one telephone circuit from each channel bank group is ringing simultaneously.